

THE CLAIMED INVENTION IS:

1. A method of delivering a bolus from a pump, the pump being a programmable medical infusion pump having a keypad, the method comprising:

5 programming a bolus amount into the pump;
 programming a duration into the pump;
 programming a percentage into the pump, the percentage defining a portion of the
 bolus amount to deliver immediately upon executing a deliver command
 and a remainder of the bolus amount to deliver over the duration upon
10 executing a deliver command; and
 executing the deliver command.

2. The method of claim 1 wherein programming a percentage into the pump includes
entering into the pump the portion of the bolus amount to deliver immediately upon
15 executing a deliver command.

3. The method of claim 1 wherein programming a percentage into the pump includes
entering into the pump the remainder of the bolus amount to deliver over the duration
upon executing the deliver command.

20 4. The method of claim 1 wherein executing the deliver command causes the pump to
begin delivery of the bolus, the bolus being insulin.

5. The method of claim 4 further comprising delivering a basal, wherein executing the deliver command causes the pump to begin delivery of the bolus, the bolus being in addition to the basal.

6. An apparatus for delivering a bolus of a medical agent to a patient, the apparatus comprising:

a pump mechanism;

a data input device; and

a processor in data communication with the keypad and arranged to control the pump mechanism, the processor being programmed to receive data specifying a bolus amount through the data port, receive data regarding duration through the data port, receive a percentage through the data port, the percentage defining a portion of the bolus amount to deliver immediately upon executing a deliver command and a remainder of the bolus amount to deliver over the duration upon executing a deliver command, and execute the deliver command thereby controlling the pump mechanism to deliver the bolus.

7. The apparatus of claim 6 wherein the data input device is a keypad having one or more buttons.

8. The apparatus of claim 6 wherein the data input device is a data port configured to communicate with a computer.

9. The apparatus of claim 6 wherein the processor is further programmed to control the pump mechanism to simultaneously deliver a basal and the bolus upon executing the deliver command.

10. A method of temporarily adjusting the delivery rate of an infusion pump, the infusion pump programmed to deliver a basal rate, the method comprising:

prompting a user to select whether to enter the temporary rate as a percent of the current delivery rate or as a new delivery rate;

entering into the pump a period of time having a beginning and an end;

entering into the pump a temporary basal rate; and

delivering the therapeutic agent at a delivery rate substantially equal to the temporary basal rate during the period of time.

11. The method of claim 10 further comprising:

selecting to enter the temporary basal rate as a new delivery rate; and

wherein entering into the pump a temporary basal rate includes entering into the pump a new delivery rate, thereby changing the basal rate to the new delivery rate for period of time.

12. The method of claim 10 further comprising:

selecting to enter the temporary basal rate as a percent; and

wherein entering into the pump a temporary basal rate includes entering into the pump a percentage by which to adjust the basal rate for the period of time thereby establishing the temporary basal rate.

13. The method of claim 12 wherein entering into the pump a percentage by which to adjust the basal rate includes entering a percentage greater than 100%.

14. The method of claim 12 wherein entering into the pump a percentage by which to adjust the basal rate includes entering a percentage less than 100%.

15. The method of claim 12 further comprising:

delivering a therapeutic agent at a delivery rate substantially equal to the basal rate before the beginning of the period of time; and

delivering the therapeutic agent at the delivery rate substantially equal to the basal rate after the end of the period of time.

16. The method of claim 15 further comprising calculating the temporary delivery rate upon entering into the pump a percentage by which to adjust the basal rate according to the equation:

$$\text{Temporary Delivery Rate} = \frac{\text{Basal Rate} \times \text{Percent}}{100}$$

where Percent is the percentage by which to adjust the basal rate.

17. An apparatus for delivering a therapeutic agent at a basal rate, the apparatus comprising:

a pump mechanism;

a data input device; and

a processor in data communication with the keypad and arranged to control the pump mechanism, the processor being programmed to prompt a user to select whether to enter the temporary rate as a percent of the current delivery rate or as a new delivery rate, receive from the data input device a period of time having a beginning and an end and a temporary basal rate, and control the pump mechanism to deliver the therapeutic agent at a delivery rate substantially equal to the temporary basal rate during the period of time.

18. The apparatus of claim 17 wherein the processor is further programmed to receive the temporary basal rate as a new basal rate and to control the pump mechanism to deliver the therapeutic agent at the new basal rate during the period of time.

19. The apparatus of claim 17 wherein the processor is further programmed to receive the temporary basal rate as a percent and to control the pump mechanism to adjust the basal rate by the percent for the period of time thereby establishing the temporary basal rate.

20. The apparatus according to claim 17 further comprising a reservoir arranged to be emptied by the pump mechanism, the reservoir being filled with insulin.
21. The apparatus of claim 20 wherein the data input device is a keypad having one or more keys.
22. The apparatus of claim 20 wherein the data input device is a data port configured to receive data from a computer.
23. The apparatus of claim 20 further comprising a screen in data communication with the processor, wherein the processor is programmed to display the prompt on the screen.